

warrant such a step. Its herring-like form, denticulated suborbital, scaly maxillary, small pectorals, backward position of the ventrals, and deeply forked caudal, sufficiently distinguish it from *Centropristes*, with which it hardly agrees in any of its characters, beyond that of wanting canines, and having the preopercle denticulated, and the opercle armed with small sharp points. Its teeth, however, are not exactly velutine, as in the typical species of that genus, but rather in fine card, with the outer row in both jaws stronger than the others. But, perhaps, one of the most marked peculiarities in this proposed genus resides in the scales, which have, instead of the usual fan of diverging striæ on their basal portions, a triangular space filled up by a number of extremely fine, closely-approximating striæ, parallel to each other, and also parallel to the basal margin, which is cut quite square and entire.\*

Although this genus is thus separated from *Centropristes*, there is no doubt of its having a near affinity with it; and also with *Grystes*, from which last, however, it is at once known by its denticulated preopercle. It is still more closely allied to *Apsilus*, which it very much resembles in its general form, as well as in some of its particular characters. Amongst other points of resemblance with this last genus, may be noticed the similarity of the teeth; the very large gill-opening; the small and inconspicuous points on the opercle; the weak spines of the dorsal and anal, both which fins also terminate in a point behind; the small pectorals, and the deeply forked caudal.

It is probable that the *Centropristes truttaceus* of Cuvier and Valenciennes also belongs to this new genus, which, as well as the *C. Georgianus*, comes from New Holland, and which those authors seem, not without much hesitation, to have placed provisionally in the group in which it now stands. It is not stated, however, whether the peculiar character of the scales in the *C. Georgianus*, above pointed out, exists also in this species.

#### ARRIPIS GEORGIANUS.

*Centropristes Georgianus*, Cuv. et Val. Hist. des Poiss. tom. vii. p. 338.

FORM.—As M. Valenciennes has given an accurate and detailed description of this fish, and as I have already stated above some of its leading characters, it is not necessary to say much further on this head in reference to the specimen in Mr. Darwin's collection. I need only point out wherein it differs from the description in the "Histoire des Poissons," the greater part of which applies exactly. M. Valenciennes states that the ventral profile is more curved than the dorsal, but there is not much difference in their respective degrees of curvature in this

\* The absence of the usual fan has suggested the name of *Arripis*, from *a priv.* et *pis*, flabellum.

specimen. The thickness of the body, which he fixes at one-third of the depth, is here nearly half the depth. The following characters may be also given, in addition to his. Above each orbit are two short crests or ridges which meet at an angle anteriorly, and the interocular space between these pairs of ridges is rather depressed; beyond, or immediately above the upper lip, the snout is a little protuberant. The band of teeth in each jaw is narrow, with the outer row longer than the others; and at the sides of the jaw, this outer row is all that is obvious. The intermaxillary is slightly protractile. The eye is hardly removed so much as one diameter from the end of the snout. The limb of the preopercle is striated; the angle at bottom rounded, and much dilated, so that the ascending margin falls in advance of a vertical. The contour of the membrane of the opercle is rounded. The cheeks, and all the pieces of the gill-cover, with the exception of the broad limb of the preopercle, are scaly: there are also a few scales on the maxillary, but none on the crown between the eyes, or on the snout, or lower jaw. The dorsal and anal terminate nearly in the same vertical line, but the latter reaches a trifle the farthest. Both fins are invested at their base with a scaly membrane, the scales of which are of a long lanceolate form. The length of the caudal equals the depth of the body. That of the pectorals equals half the depth: these fins are attached a little behind the opercle, and a little below the middle. The point of attachment of the ventrals is in a vertical line which passes through the middle of the pectorals, and coincides with the commencement of the dorsal. They are longer than the pectorals; and in their axillæ is a lanceolate membranaceous scale half their own length. There is a similar, but shorter scale in the axilla of the pectorals also.

B. 7; D. 9/16; A. 3/10; C. 17%; P. 15; V. 1/5

Length 9 inches 10 lines.

COLOUR.—Not noticed in the recent state. In spirits, the whole fish appears of a nearly uniform dull metallic yellowish-white, tinged with olive on the back and upper part of the sides.

Mr. Darwin obtained this species in King George's Sound, in New Holland, the same place in which it was discovered by MM. Quoy and Gaimard.

#### APLODACTYLUS PUNCTATUS. Val.

*Aplodactylus punctatus*, Cuv. et Val. Hist. des Poiss. tom. viii. p. 352. pl. 242.

This very remarkable fish was first sent from Valparaiso, by M. D'Orbigny, where it was also observed by M. Gay. Mr. Darwin's collection contains a specimen, which has unfortunately lost the number attached to it; but as he made a collection on that coast, it was probably obtained in the same locality. The description given of it in the "Histoire des Poissons," is so detailed as well as accurate, and the figure so exact, that it is quite unnecessary to annex that of the present individual. I may merely observe that the number of simple rays at the bottom